IN THE DRAWINGS

Please replace Figure 1 with the Replacement sheet of Figure 1 as attached hereto.

REMARKS

The Office Action dated October 17, 2006, has been received and carefully noted. The above amendments to the claims and specification, and the following remarks, are submitted as a full and complete response thereto.

Claims 14-15, 18 and 21 have been amended to more particularly point out and distinctly claim the subject matter of the invention. No new matter has been added, and no new issues are raised which require further consideration and/or search. Claims 1-11 and 13-23 are submitted for consideration.

The drawings were objected to for failing to comply with 37 CFR 1.84(p)(4). The drawings and the specification have been amended to overcome this objection. Therefore, Applicant requests that the objection be withdrawn.

Claims 18, 21, 14 and 15 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which is the invention. Claims 18, 21, 14 and 15 have been amended to overcome this rejection. Therefore, Applicant requests that this rejection be withdrawn.

Claim 21 was rejected under 35 U.S.C. 112, second paragraph as being unclear. Claim 21 has been amended to overcome this rejection. Therefore, Applicant requests that this rejection be withdrawn.

Claims 1-11, 16-17 and 22-23 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,452,964 to Yoshida (hereinafter Yoshida). The rejection

is traversed as being based on a reference that neither teaches nor suggests the novel combination of features clearly recited in claims 1-11, 16-17 and 22-23.

Claim 1, upon which claims 2-11 and 13-15 depend, recites an apparatus including a calculator adapted to receive indications of a selected communication indicia associated with communication characteristics of a communication channel during a selected interval. The apparatus is configured to transmit data upon the communication channel and to dynamically select at least a first switching threshold used in selection of a modulation parameter. The calculator is configured to select the at least first switching threshold. The first switching threshold is changeable responsive to changes in the selected communication indicia and the first switching threshold is selected by the calculator to at least satisfy a first performance criteria and to satisfy at least a second performance criteria.

Claim 16, upon which claims 17-20 depend, recites a method including selecting at least first switching threshold responsive to indications of a selected communication indicia associated with communication characteristics of a communication channel during a selected interval. The first switching threshold is selected to at least satisfy a first performance criteria and to satisfy at least a second performance criteria. The method also includes selecting the modulation parameter by which the data is operated upon by the first communication station prior to transmission upon the communication channel. The method further includes changing the at least first switching threshold responsive to changes in the indications of a selected communication indicia and

selectably changing the modulation parameter responsive to changes in the at least first switching threshold.

Claim 22 recites an apparatus including selecting means for selecting the at least a first switching threshold responsive to indications of a selected communication indicia associated with communication characteristics of a communication channel during a selected interval, the first switching threshold selected to at least satisfy a first performance criteria and to satisfy at least a second performance criteria. The apparatus also includes selecting means for selecting the modulation parameter by which the data is operated upon by the first communication station prior to transmission upon the communication channel and changing means for changing the at least the first switching threshold responsive to changes in the indications of the selected communication indicia. The apparatus further includes means for selectably changing the modulation parameter responsive to changes in the at least the first switching threshold.

Claim 23 recites an apparatus that includes a selecting unit configured to select the at least a first switching threshold responsive to indications of a selected communication indicia associated with communication characteristics of a communication channel during a selected interval, the first switching threshold selected to at least satisfy a first performance criteria and to satisfy at least a second performance criteria. The apparatus also includes a selecting unit configured to select the modulation parameter by which the data is operated upon by the first communication station prior to transmission upon the communication channel and a changing unit configured to change the at least the first

switching threshold responsive to changes in the indications of the selected communication indicia. The apparatus further includes a changing unit configured selectably changing the modulation parameter responsive to changes in the at least the first switching threshold.

As outlined below, Applicant submits that the cited reference of Yoshida does not teach or suggest the elements of claims 1-11, 16-17 and 22-23.

Yoshida discloses an adaptive modulator/encoder 104 of a transmitter in station A that executes encoding and modulation processes corresponding to a plurality of modulation levels. A modulation level decision unit 105 of the transmitter decides the modulation level of a signal to be transmitted, based on both an average received power reported from a received power measurement unit of a receiver and a threshold at each modulation level, and reports it to a data selector 106 of the transmitter in station A. The data selector 106 selects a modulation signal among modulation signals at each of the modulation levels outputted from the adaptive modulator/encoder which corresponds to the modulation level reported from the decision unit, and transmits it to a correlation channel as a transmitted signal for station B. See Col. 6, lines 4-27.

Yoshida also discloses that first an average carrier-to-noise (CNR) ratio is observed by a receive power measurement unit in each receiver, as the observing operation of an average received power. The observation result is obtained by the decision unit 105 in each transmitter and a modulation level is decided by the decision unit 105 in each transmitter based on a threshold CNR at each modulation level. A

control that sets the average transmitted power of a generated signal to a predetermined value is incorporated in each of the dynamically selected modulation methods. See Col. 7, lines 16-Col. 8, line 51.

Applicant submits that Yoshida simply does not teach or suggest the combination of elements clearly recited in claims 1-11, 16-17 and 22-23. Each of claims 1-11, 16-17 and 22-23 recites a calculator coupled to dynamically select at least a first switching threshold used in selection of a modulation parameter, the first switching threshold changeable responsive to changes in the selected communication indicia, and the first switching threshold selected by said calculator to at least satisfy a first performance criteria and to satisfy at least a second performance criteria. According to the Office Action, Yoshida teaches these features. However, unlike what is alleged by the Office Action, Yoshida does not teach dynamically selecting the first switching threshold, the first switching threshold changeable responsive to changes in the selected communication indicia, and the first switching threshold selected by said calculator to at least satisfy a first performance criteria and to satisfy at least a second performance criteria, as recited in the presently pending claims.

Yoshida merely teaches that data selector 106 **selects a modulation signal** among modulation signals at each of the modulation levels based on a threshold CNR at each modulation level. There is no teaching or suggestion in Yoshida that the calculator **dynamically selects** at least a first switching threshold used in selection of a modulation parameter, the first switching threshold **changeable responsive to changes in the**

selected communication indicia, and the first switching threshold selected by said calculator to at least satisfy a first performance criteria and to satisfy at least a second performance criteria, as recited in the presently pending claims. Therefore, Applicant respectfully asserts that the rejection under 35 U.S.C. §102(e) should be withdrawn because Yoshida does not teach or suggest each feature of claims 1, 16, 22 and 23 and hence, dependent claims 2-11 and 17 thereon.

Claims 16-17 and 22-23 were rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,198,734 to Edwards (hereinafter Edwards). The rejection is traversed as being based on a reference that neither teaches nor suggests the novel combination of features clearly recited in claims 16-17 and 22-23.

Claims 16-17 and 22-23 have been discussed above. Edwards discloses a system where a voice/data signal is transmitted across a channel where it is received by a receiving end of a circuit. At the receiving end, the transmitted signal is analyzed to determine the transmission characteristics of the signal. Parameters are accessed and it is determined that the signal quality is varying outside of an acceptable boundary or beyond an acceptable threshold, a feedback signal is transmitted to the transmitter. The transmitter then adapts its scheme of transmission on a sequential basis. See at least Col. 5, lines 6-47.

Applicant submits that Edwards simply does not teach or suggest the combination of elements clearly recited in claims 16-17 and 22-32. Each of claims 16-17 and 22-32 recite d**ynamically selecting at least a first switching threshold** used in selection of a

modulation parameter, the first switching threshold **changeable responsive to changes in the selected communication indicia**, and the first switching threshold selected by said calculator to at least satisfy a first performance criteria and to satisfy at least a second performance criteria. Edwards does not teach or suggest these features. Edwards merely teaches that parameters are accessed to determine if the signal quality is varying outside of an acceptable boundary or beyond an acceptable threshold. Therefore, Applicant respectfully asserts that the rejection under 35 U.S.C. §102(e) should be withdrawn because Edwards does not teach or suggest each feature of claims 16, 22 and 23 and hence, dependent claim 17 thereon.

As noted previously, claims 1-11 and 13-23 recite subject matter which is neither disclosed nor suggested in the prior art references cited in the Office Action. It is therefore respectfully requested that all of claims 1-11 and 13-23 be allowed and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicant's undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicant respectfully petitions for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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Enclosures: Replacements Sheet Drawing – Figure 1